Membrane separation apparatus with means for suppressing substances adhering on the surfaces of . the membranes

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In the title app. comprising appropriately spaced plural membrane elements (e.g., ceramic membrane elements), and cleaning the surfaces of the membranes by passing gas-liq.

mixed sweeping flows between adjacent membrane surfaces in vertical direction, flexible ribbons (e.g., synthetic resins or metal foils) are inserted in those flow paths in vertical direction, and the upper and lower ends on the ribbons are fixed by fixing members. Adhering of substances on the surfaces of the membranes is suppressed. Cleaning effect is increased. The membrane sepn. app. is suitable for for water purifn.